



STRATEGIC UPDATE

China's Digital Silk Road in Indonesia: Progress and implications

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Introduction

Ongoing discussions about the Belt and Road Initiative (BRI) tend to concentrate on its tangible elements; mainly on its infrastructure investments such as roads, railways, airports, and seaports. Nonetheless, aside from the commonly known tangible parts of the BRI—the Silk Road Economic Belt (land route) and the 21st Century Maritime Silk Road (sea route)—a third “Silk Road” was also launched by China in 2015. The “Information Silk Road”, since rebranded as the Digital Silk Road (DSR), has the stated objective of enhancing global communication linkages and accelerating the globalisation of Chinese tech firms.

To date, the DSR has been implemented in many countries along the BRI routes. Indonesia, as one of the most important destinations of the BRI over the years, has increasingly become a target to boost China's digital foothold globally. Today, Indonesia is a country with a growing economy and considerable potential in the Southeast Asian region. Its GDP of USD \$1 trillion and mobile commerce market size of USD \$7.1 billion combined with its large population—who are considered the most active digital users globally—and vigorous start-up environment has made it an attractive location for China to implement the DSR.¹

Nonetheless, Indonesia's role as a major destination for China's DSR is rarely discussed. Most of the existing literature concentrates on the implementation and implications of the DSR in and on ASEAN in general or in other countries. Therefore, this Strategic Update attempts to discuss the progress of the realisation of the DSR in Indonesia and its potential repercussions to the country.

Progress

In broad terms, the implementation of the DSR in Indonesia can be divided into two aspects: hard aspects, which concentrate on the tangible elements of the DSR such as the signed deals and investments; and soft aspects, which deal with the soft-power efforts that take place alongside the tangible realisation of the project.

Hard aspects

The most important aspect of the DSR in Indonesia is the penetration of investments by Chinese smartphone firms in technological infrastructures and e-commerce in Indonesia. A report from Canalyst points out that from 2018 to 2019, Chinese mobile phones sales in Indonesia, dominated by Huawei, Xiaomi, and Oppo, grew by more than a third — more than any mobile brand.² This has made Chinese-designed, localised mobile apps prevalent

among smartphone users in Indonesia. These apps' communications are transmitted and relayed by Chinese-designed base-station technology and data centres, making a large portion of the Indonesian cloud appear to be Chinese. In a Huawei-sponsored article published in the Jakarta Post, it was reported that the company had increased its operation size, employing more than 2,000 people in the Jakarta office and partnering with around 200 companies who provide more than 40,000 jobs across Indonesia. When Huawei started twenty years ago, it only had twenty workers. The company has been constructing thousands of kilometres fibre-optic cable networks in the country alongside band transceiver stations, or towers, that can facilitate wireless communication in various regions so that 5G technology can be accessed evenly across the Indonesian islands.³ Chinese technology expansion is welcomed by Indonesia; when the US suspended Huawei operations, the President of Telkom Indonesia, the country's largest telecommunication company, said his operation would collaborate with any vendor in the world, including Chinese companies.⁴

Other enterprises have also made significant investments in the major e-commerce firms in Indonesia. Alibaba has invested a total of USD \$4 billion in Lazada, a leader in Indonesian e-commerce which has operations in other ASEAN countries.⁵ The investment

has made Alibaba a significant controlling shareholder in the company. Alibaba has additionally invested in three of the other largest e-commerce companies in the country, Bukalapak, DANA, and Tokopedia, in a strategic effort to secure dominance in the market ahead of any attempted entry by its American adversary, Amazon. Moreover, Shopee, which is the largest e-commerce platform in the ASEAN region, has recruited Chinese sellers to sell their products in the regional market on the platform. Through investments from China-based Tencent, it established a team of hundreds of workers in Shenzhen to develop a complete domestic seller's IT system and service team to support buyers in the region. Another crucial e-commerce platform is JD.id, which was established in 2015 as a joint venture between China JD.com and Provident Capital Singapore.⁶ JD.com—which buys goods from the US, Europe, Australia, and New Zealand and sells them in China—has 256 major warehouses across China, covering most of the key domestic cities along the BRI, including Shanghai, Xian, and Chengdu. Another breakthrough took place in 2017, when China, through Tencent, poured a USD \$1.2 billion investment into Indonesia's Gojek, an on-demand motorbike ride and delivery company that is competing Grab and Uber in the country.⁷

Beyond investing in Indonesia's growing e-commerce market, China's DSR in Indonesia also involves participating in 5G-related infrastructure projects. Huawei has signed contracts with Indosat Ooredoo, Indonesia's second-largest telecommunication firm, for the installation of 5G infrastructure in some regions of Indonesia, along with offering training on 5G technology to 100,000 Indonesians on 5G technology and a discount of 20% to 30% on necessary equipment compared to the prices of other firms such as Nokia.⁸ Establishing data centres in Indonesia is also part of the DSR in the Archipelago, with Tencent Cloud and Alibaba Cloud leading the field.

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China's digital penetration in Indonesia has also become apparent on the state level. For example, the development of 5G networks was one of the topics discussed during Chinese Foreign Minister Wang Yi's visit to Indonesia in January 2021. The two countries have signed a Memorandum of Understanding (MoU) on the improvement of internet security and technological cooperation.⁹ It is the first internet security agreement that China has signed with a foreign country. The agreement stipulates that Indonesia's National Cyber and Crypto Agency and the Cyberspace Administration of China would work together on the internet governance system, data security, and the cyberspace order by upholding principles of state sovereignty in cyberspace. Huawei also announced that it was collaborating with Indonesia's Agency for the Assessment and Application of Technology (BPPT) in three fields: artificial intelligence (AI), cloud computing, and 5G networks.¹⁰ On the first two counts, Huawei is involved in developing BPPT's capacity and helping the agency develop and apply AI and cloud computing in the Indonesian economy. The government of President Joko Widodo views collaboration between Huawei and Indonesia's technology industry, government, and universities as central to achieving its goal of producing a creative and digital economy by 2035 and a “more developed” nation by 2045. Apart from this, the government in Jakarta has appointed Jack Ma, the founder of Alibaba, as the e-commerce advisor responsible for helping the development of e-commerce in Indonesia.

Another crucial aspect of DSR in Indonesia is the penetration of China's cashless payment systems, mainly WeChat Pay and Alipay. Although previously the two systems were widely used illegally, Bank Indonesia (BI) approved WeChat Pay for cashless transactions in 2020, albeit with certain conditions: (1) that it cooperates with the commercial banks with an initial

capital of Rp 30 billion; and (2) that it can only be used by Chinese tourists and all transactions must be carried out in rupiah.¹¹ The decision came after an increasing number of Chinese tourists began visiting Indonesia.

WeChat Pay has begun cooperating with several banks. Indonesia's primary state-owned lenders, including PT Bank Negara Indonesia (BNI), CIMB Niaga, and Bank Central Asia (BCA), have all expressed their willingness to work with the mobile wallet provider. With these banks functioning as settlement banks, every transaction through WeChat Pay in Indonesia must pass through one of them. In this manner, the funds that move in and out generate foreign exchange earnings for Indonesia.

The expansion of Chinese online payment systems appears to be moving forward. PT Bank Mandiri (Persero) Tbk is working on the development process and licensing cooperation with Alipay. Like WeChat Pay, Alipay has operated in Indonesia illegally for some time. It is also endeavouring to become a legal method of payment, but some of the requirements have not yet been completed. BI Deputy Governor Sugeng said that the Bank requires further paperwork from Alipay, but that there has been no further response from the digital wallet provider. Bank Republik Indonesia (BRI) has expressed its willingness to partner by signing a Memorandum of Understanding (MoU) with Alipay

and the bank is currently preparing the necessary IT infrastructure to synchronise their systems, so it seems that soon Alipay will follow in the footsteps of WeChat Pay.

Soft aspects

Besides hard aspects, the implementation of China's DSR in Indonesia also involves soft aspects, which mainly focus on strengthening understanding and acceptance of China's growing digital foothold among the Indonesian people. The most important effort has been carried out by Huawei. The company has been working to disseminate information about 5G and its potential benefits to the Indonesian public through various platforms such as seminars, talks, and conferences organised in places such as schools and government offices. In 2021, Huawei began collaborating with the Indonesian Presidential Staff Office to carry out a five-year vocational training course in digital literacy for 100,000 Indonesian officials.¹² Huawei has also initiated a digital talent training programme in more than 33 colleges and universities in Indonesia, which aims to equip young Indonesians with knowledge and skills in Artificial Intelligence (AI), Internet of Things (IoT), big data, and the cloud. To that end, a number of programmes are being rolled out, such as the ICT Academy, which has been launched in over 70 countries, along with several other sub-

programmes including ICT Competition, Seeds for the Future, and TechDay, which are organised to expand skills in utilising digital technology. The last ICT Competition saw the participation of 53 teams from 24 universities and a total of 1,164 Indonesian students.

In addition, Huawei initiated the Spark programme to encourage young individuals to build their own start-ups. In Indonesia, the programme trained approximately 52,000 Indonesians between 2020 and 2021.¹³ Huawei has additionally signed an MoU on digital development with Telkomsel, Indonesia's largest telecommunications operator, whereby Telkomsel employees receive 200 days of training provided by experts from Huawei.¹⁴ Topics that are taught include "Leadership in the Digital Transformation Area", "Global Operator Benchmark", and "Technology Knowledge Transfer" covering 5G, customer experience management, network function virtualisation (NFV), software-defined networking (SDN), the cloud, big data, AI, and IoT.

Implications

As a country that is currently working to accelerate their digital transformation, Indonesia views the DSR as a response to its needs. The Indonesian government has in recent years exerted efforts to improve access to telecommunications in some of its regions, especially poor

areas and the eastern part of Indonesia, which still lack digital connectivity and technological infrastructure. For Indonesia, Chinese companies' offers of 5G and other digital infrastructure, frequently at attractive prices, are responses to its needs. As an example, the DSR could accelerate the internet network infrastructure of Indonesia.

The positive benefits of the DSR nonetheless come with some concerns, primarily regarding the role of Chinese technologies, especially 5G, in China's espionage efforts. This stems from the requirement placed on Chinese companies to cooperate with China's authorities on security matters. This has led to increased worries not only about the possibility of China surveilling the Indonesian government, but also about the government of Indonesia using Chinese technologies to spy on its own people. It is crucial to note that firms in China have already assisted governments in some parts of the world with developing surveillance capabilities that could be used against dissidents and opposition groups. China has also helped train foreign government officials on how to monitor and censor the internet. As mentioned above, Indonesia has signed an MoU with China on boosting internet security and tech cooperation. Given that the current Indonesian government has taken steps to undermine and repress its opponents, it is possible that the country's cooperation with China on

the DSR could lead to a decline in the quality of democracy in Indonesia.

As a matter of fact, reports of increased digital authoritarianism in Indonesia closely followed the launch of one of Huawei's programmes, the ASEAN Academy Engineering Institute in Jakarta. These reports included the imposition of the Job Creation Law and the increase of digital attacks on critics.⁺ Jakarta also announced a regulation to censor digital content, which provoked denunciations from human-rights advocates.¹⁵ There is also a worry that China's involvement in Indonesia's AI development could offer Beijing more sway not only in its economic activities with Indonesia, but also in policymaking. It could additionally assist Chinese intelligence agencies in acquiring civilian and corporate data useful to Chinese firms.

Another issue is that the implementation of the DSR could lead Indonesia to becoming more reliant on China. Indonesia has increasingly relied on China, especially in the economic and health sectors. The role of Chinese companies in assisting the government to reach a particular economic goal, in this case digital transformation and a digital economy, could increase Indonesia's reliance on China. It is difficult to deny China's participation in the agenda-setting process when there is involvement of a particular party, i.e. Jack Ma, in the policy decision-making process. Moreover, Chinese investment activities in Indonesian e-commerce could generate unfair competition between Chinese and local businesses. The selling pattern of the e-commerce platforms where China has invested shows the domination of Chinese products. This is difficult to avoid given that China can in effect use its invested firms to distribute its own products. It was reported that 90% of products sold in the Indonesian

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marketplace are “Made in China”.¹⁶ These products are often under-priced, making them sell more than local products. The dependency could also come from the fact that these digital infrastructures would be used as digital components of infrastructure projects that China is currently building. In the rail industry, for example, Chinese control and signalling systems as well as smart monitoring systems are expected to be used in the operations.¹⁷ This could make Indonesia continuously reliant on Chinese technologies and assistance in the future.

With regard to the soft aspects of China’s DSR, the efforts have undeniably increased and expanded young Indonesians’ technological knowledge and skills. However, there are potential negative implications as well. By developing individuals equipped with knowledge and technical skills to run Chinese-managed data centres, there will be more Indonesians that the Chinese government could employ in its surveillance efforts. There is also a worry that Indonesia may have more individuals who believe the nobility of Chinese policies and practices with regard to internet, technology, censorship, and surveillance and would like to implement the same methods in Indonesia.

Therefore, Indonesia needs to ensure that it could benefit from China’s DSR, while at the same time creating appropriate measures to minimise the potential risks. ■

Notes

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This Strategic Update discusses the progress of China's Digital Silk Road in Indonesia, a major destination, in both its hard and soft aspects, as well as the potential impact of its implementation. Chinese companies are offering a response to Indonesia's needs, but concerns exist, especially surrounding security and surveillance, that Indonesia's increasing reliance on China could also further erode its democracy.

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